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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/604,873	08/22/2003	Robert R. Norris	718395.41	1872

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EXAMINER

BENTON, JASON

ART UNIT	PAPER NUMBER
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3747

DATE MAILED: 07/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/604,873	Applicant(s) NORRIS	
	Examiner Jason Benton	Art Unit 3747	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 7, 9, 14, 15, 23-25, 28, and 29 are rejected under 35

U.S.C. 102(e) as being anticipated by Asano.

The patent by Asano (6,508,211) shows a valve (526) for regulating fluid flow. A first valve chamber includes an inlet port (506) for receiving fluid into the valve. A second valve chamber includes an outlet port (510) for dispensing fluid from the valve. The first valve chamber includes an opening between the first valve chamber and the second valve chamber. A sealing mechanism is operatively attached a member. The sealing mechanism can move adjacent to the opening when the member is in a first position and the sealing mechanism can move away from the opening when the member is in the second position.

The actuating member can be a first member that is rotatable and operatively attached to a stepper motor and a second member that engages the first member for linear movement of the second member between a first position

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and a second position when the first member is rotated by a stepper motor (Col. 15 lines 49-54).

The second member includes a metering orifice to provide fluid flow between the first valve chamber and the second valve chamber. The metering orifice can be selectively blocked by the sealing mechanism.

The sealing mechanism includes a poppet.

The inlet port for the valve is fluidly connected to a bypass loop that receives fluid flow from an engine that was pumped into the engine from a water pump. The outlet port of the valve is fluidly connected to an inlet for the water pump. The inlet port for the valve is capable of fluid connection to an engine and the outlet port of the valve is capable of fluid connection to a heater core..

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 5, 6, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Asano.

The patent by Asano does not specifically show the actuator. It is the view of the examiner that it is inherent that each of the elements are enclosed within a housing.

It is also the view of the examiner that a terminal connector mechanism would be inherent for an electrical connection to the stepper motor.

Claims 3, 4, 10-12, 16, 17, 19-22, 26, 27, and 30-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Asano in view of Saur.

The patent by Asano does not show details of the valve and actuator arrangement. The patent by Saur (4,550,693) shows the valve actuator with stepper motor (3), first element (6), and second element (5). Also shown is a biasing element (23) that is in contact with the second member. The biasing element is a spring.

A cover member is located between the stepper motor and the sealing mechanism.

Claims 8, 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Asano.

The patent by Asano does not show the shape of the metering orifice. It is the view of the examiner that the shape of the metering orifice is a choice of design.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Benton whose telephone number is (703) 305-6800. The examiner can normally be reached on flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Henry Yuen can be reached on (703) 308-1946. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JB


Henry C. Yuen
Supervisory Patent Examiner
Group 3700